# Tennessee Department of Environment and Conservation Office of Environmental Assistance Environmental ideas and fact sheet

## **Energy**

- ✓ Turn down your system's thermostat to 68°F during the day in winter and leave it up at 78°F during the summer. Consider getting an Energy Star programmable thermostat.
- ✓ Lower your water heater temperature to 120<sup>0</sup>F and reduce hot water use by taking shorter showers and using cold water for laundry whenever possible. Each 10<sup>0</sup>F reduction on the water heater results in a 13% reduction of your hot water heating costs.
- ★ Keep curtains open on the south side of the house and closed on the north side during the day in the winter to take advantage of solar heat.
- ✓ Clean refrigerator coils every few months as part of a general household maintenance plan. Set the temperature at 36°F to 39°F and the freezer temperature from 0°F to 5 °F.
- ✓ Make sure the fireplace damper/flue is closed when not in use.
- Match the size of your pot or pan to the size of the stove burner and cover it with a lid when cooking.
- ✓ Once a year, drain about one gallon of water from your water heater to remove sediment.
- ★ Air-dry dishes instead of using the dishwasher's heat drying option.
- ✓ Caulk and weather strip around windows and doors to stop air leaks. Seal any gaps in floors and walls around pipes and electrical wiring.
- ✓ Change filters monthly or install a "filter whistle" to let you know when to change them.
- Replace incandescent bulbs with compact fluorescent lamps. CFLs use ¼ the electricity that incandescent bulbs do and last up to 20 times as long. If every household in the U.S. replaced just one incandescent bulb with a CFL, it would prevent enough pollution to equal removing 1 million cars from the road yearly.
- ★ Repair air leaks and seal and insulate heating system ductwork.
- Add insulation to your attic, crawl space, and any accessible exterior walls. Add pipe insulation to the first five feet of water pipe coming from your water heater. Install light switch and electrical outlet seals on exterior walls.
- ▶ Look for the Energy Star label when replacing appliances or electrical equipment. Energy Star labeled appliances use 10-50% less energy. Example: ES refrigerators use 40% less energy than models sold in 2001.
- ✓ Wrap your water heater with insulation or install an insulating blanket.
- ✓ Use power strips for home electronics and turn off power strips when the equipment is not in use. Up to 50% of the power a piece of electronic equipment uses is while it is turned off.
- ✓ Check out more ideas at U.S. EPA's Energy Star: <a href="www.energystar.gov/">www.energystar.gov/</a>; The Home Energy Saver: <a href="http://hes.lbl.gov/">http://hes.lbl.gov/</a>; and the Geothermal Heat Pump Consortium: <a href="www.geoexchange.org">www.geoexchange.org</a>

### Air

- Take part in the Green Power Switch where possible (<u>www.greenpowerswitch.com</u>) which promotes the creation and use of renewable energy resources such as wind, solar, and landfill methane.
- ↑ Maintain your car regularly. Under inflated tires can lead to lower gas mileage and more gas use.
- Consider an alternative fuel or gas-electric hybrid vehicle on your next car purchase. E-85 fuel is made from corn and is considered a renewable fuel. Hybrid vehicles use a combination of electric motors and gasoline engines to achieve rates of 50 to 60 miles per gallon. For more information, check out the Governor's Ethanol Coalition: <a href="www.ethanol-gec.org/">www.ethanol-gec.org/</a> or the National Ethanol Vehicle Coalition: <a href="www.e85fuel.com">www.e85fuel.com</a>
- Rideshare, carpool, use the bus, ride a bicycle, or walk
- Avoid mowing lawns during the heat of the day.
- Combine errands into one trip to limit travel.

#### Water

- Fix all leaky plumping fixtures. A faucet dripping one drop of water per second can waste up to 192 gallons of water per month.
- The toilet is the largest user of water in the home. If you do not have a water efficient toilet (1.6 gpf or less), then you can place a brick or bottle of water in the tank to reduce the amount of water it uses and it will still work effectively. Replacing older toilets can save 14,000 gal/year.
- Consider replacing your older washer with an Energy Star certified model. Energy Star washers use 35-50% less water per load as well as 50% less energy.
- Turn off the water when brushing your teeth or washing the dishes.
- Water your lawn in the early morning or late afternoon, not during the middle of the day.
- Install aerating low-flow faucets and showerheads. Often this is an inexpensive change that can result in saving approximately 1700 gallons of water per year.
- For more information check out H2ouse Water Saver Home: <a href="www.h2ouse.org/">www.h2ouse.org/</a>

## **Hazardous Waste**

- ① Take an inventory of potentially harmful chemicals in your home, basement, and garage. Know what you have and store it properly.
- ① Buy and use natural or nontoxic cleaners, polishes, and disinfectants.
- ① Use alternatives to toxic herbicides and insecticides.
- ① Use rechargeable batteries
- ① If you have hazardous chemicals you no longer use, dispose of them properly. Check out the Household Hazardous Waste collection program for a time and location near you: http://www.state.tn.us/environment/swm/hhw/
- ① Recycle your used oil. Several places will accept used motor oil and collect it for recycling. Check out the Used Oil Recycling site for more info: http://www.state.tn.us/environment/swm/oil/
- ① A gallon of used motor oil can produce the same amount of motor oil as 42 gallons of crude oil and uses only 1/3 the energy.
- ① If not recycled, one quart of used oil can pollute 250,000 gallons of drinking water.

## Reduce, Reuse, Recycle

- Buy permanent items rather than disposable.
- Buy products with less packaging. We often pay more for food packaging than we pay the farmer for growing that food.
- Buy only what you need. Americans throw away about 10% of the food they buy at a supermarket. This results in dumping the equivalent of 21 million shopping bags full of food into the landfill each year.
- Repair items as much as possible.
- Use durable coffee mugs or cups rather than plastic or Styrofoam cups.
- Use cloth napkins or towels.
- Reuse boxes for storage or shipping.
- Purchase refillable pens and pencils.
- Look for products made from recycled materials to encourage more use of recycled content.
- An estimated 4.2 lbs of solid waste is generated per person per day. A lot of this garbage can be recycled.
- One ton of recycled paper saves 4100 kilowatt hours of electricity, 17 trees, 6,953 gallons of water, 463 gallons of oil, and 3.3 cubic yards of landfill space.
- Recycling one ton of aluminum saves 27 cubic yards of landfill space. Using recycled beverage cans to produce new cans allows the aluminum can industry to make 20 times more cans for the same amount of energy.
- Recycling one ton of PET (a type of plastic) containers saves 7.4 cubic yards of landfill space. Although plastics account for only 7% of the waste stream by weight, they occupy 20% of the volume.

Recycled plastics can be made into many things: bags, clothing, handles, baskets, and much more. Half of all polyester carpet made in the U.S. is made from recycled plastics.  Recycling one glass bottle saves enough electricity to light a 60-watt incandescent bulb for 4 hours (and for a CFL that can replace that incandescent bulb, it is enough electricity for 16 hours of light). Using recycled glass to make new glass cuts related air pollution by up to 20%.  For every pound of steel that is recycled, enough energy is saved to light a 60-watt incandescent bulb for a day 4 days if it's a CFL to replace that 60-watt incandescent bulb.  For more information check out: EPA eCycling: <a href="www.epa.gov/eCycling/">www.epa.gov/eCycling/</a> ; EPA Buying Recycled: <a href="www.epa.gov/epaoswer/non-hw/muncpl/buyrec.htm">www.epa.gov/epaoswer/non-hw/muncpl/buyrec.htm</a> ; and the Tennessee Recycling Coalition: <a href="www.trc-online.org/">www.trc-online.org/</a>
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